

## **ABSTRACT**

**Aim of the study:** The aim of this study was to evaluate the usefulness of the Human Amniotic Membrane (AM) as a biological graft material after excision of intraoral lesions.

**Materials and Methods:** A lyophilized AM (procured from tissue bank of TATA Memorial Hospital) was used in the treatment of 10 patients who had developed secondary surgical defects in the tongue and buccal mucosa after the surgical excision of precancerous lesions such as leukoplakia, erythroplakia, and verrucous hyperplasia. The effectiveness of the AM was assessed by scoring its operability during the surgical procedure and by the hemostatic status, pain relief, feeding situation, epithelialization and scar contracture in the postoperative period. Its usefulness was evaluated by considering its effectiveness and safety based on the absence of wound infection and graft rejection.

**Results:** The membrane was found to be easy to handle as an intraoral graft material. It adhered well to the bare connective and muscular tissues. Graft was well taken up in all cases without any significant bleeding. Only one buccal case had shown severe contracture and associated pain. No remarkable adverse effects were observed in the process of wound epithelialization. Two patients had episode of infection at 2 weeks and 1 month post op follow up. The average score of the patients was 14.1 points (9 to 16 points) in the present study, with 16 being the highest possible score.

**Conclusion:** This study showed the clinical usefulness of the human AM as a biological graft material when used intraorally. Although the number of cases was small, the results suggested that the human AM is biologically acceptable graft to oral wounds and could be a suitable clinical alternative for repair of the oral defects.

**Keywords:** Amniotic Membrane, Lyophilized, Biological graft, Precancerous lesions.